

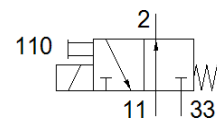
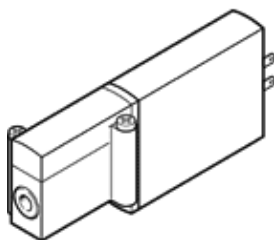
# Solenoid valve

## MHA2-MS1H-3/20-2

Part number: 196139

FESTO

individual valve, fast switching.



## Data sheet

Feature	Value
Valve function	3/2 open, monostable
Type of actuation	electrical
Width	10 mm
Standard nominal flow rate	100 l/min
Operating pressure MPa	-0.09 ... 0.8 MPa
Working pressure	-0.9 ... 8 bar
Design structure	Pressure-relieved poppet valve
Type of reset	mechanical spring
Protection class	IP65
Authorization	RCM Mark c UL us - Recognized (OL)
CE symbol (see declaration of conformity)	according to EU-EMV guideline in accordance with EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
Nominal size	2 mm
Grid dimension	14 mm
Note on grid dimension	Minimum distance between the valves is 4 mm
Exhaust-air function	throttleable
Sealing principle	soft
Assembly position	Any
Manual override	Pushing
Type of piloting	direct
Flow direction	reversible with restrictions
Lap	Underlap
Polarity protected	Bipolar
Additional functions	Spark arresting Reduction of holding current Protective circuit
Operating pressure, reversible	-0.09 ... 0.1 MPa
Working pressure, reversible	-0.9 ... 1 bar
Operating pressure, reversible	-13.05 ... 14.5 psi
Maximum switching frequency	330 Hz
Switching time off	2 ms
Switching time on	1.7 ms
Tolerance for Switching time OFF	+10 %/-30 %
Tolerance for Switching time ON	+10%/-30%
Measuring of the switching time at 1 Hz and above	0.2 ms
Duty cycle	100 %
Characteristic coil data	24 V DC: low-current phase 1.25 W, high-current phase 5 W
Permissible voltage fluctuation	+/- 10 %
Operating medium	Compressed air in accordance with ISO8573-1:2010 [7:4:4]
Note on operating and pilot medium	Lubricated operation possible (subsequently required for further operation)

Feature	Value
Vibration resistance	Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6
Restriction ambient and medium temperature	related to switching frequency
Shock resistance	Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27
Corrosion resistance classification CRC	2 - Moderate corrosion stress
PWIS conformity	VDMA24364-B1/B2-L
Medium temperature	-5 ... 40 °C
Ambient temperature	-5 ... 40 °C
Product weight	60 g
Electrical connection	2-pin Plug
Mounting type	On subbase
Pneumatic connection, 11	Subbase
Pneumatic connection, port 2	Subbase
Pneumatic connection, 33	Subbase
Materials note	Conforms to RoHS
Material seals	HNBR NBR
Material housing	Die-cast zinc, coated
Material screws	Galvanized steel